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***        User ID:            d26fmew                                      ***
***        User Name:          MARK E. WALLERSON                            ***
***        User Phone:         0003058581                                   ***
***        Workstation Id:     WSHBUEUC                                     ***
***        Printer Id:         wemtptr                                      ***
***        Date:               Mon Feb  2 1998                              ***
***        Time:               14:17:03                                     ***
***        Job #              0210                                          ***
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* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
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*  responsibility for any party's use, or the results of  *
*  such, of the data.                                     *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
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*        Monday through Friday:       6:30am - 9:00pm     *
*        Saturday, Sunday, Holidays: 8:30am - 5:00 pm     *
*                                                         *
*     The Help Desk staff at this number will handle all APS *
*     related questions.                                  *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*     >>>>>>>>>>>> NEW SUNDAY HOURS !!! <<<<<<<<<<<<       *
*                                                         *
*     The APS is available:                               *
*            6:30am - 9:00pm Monday through Friday        *
*            7:30am - 5:00pm Saturday, Sunday, Holidays   *
*                                                         *
*        APS is unavailable Thanksgiving Day, Christmas Day, *
*        and New Year's Day.                              *
*                                                         *
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*               W E L C O M E    T O    T H E             *
*          U. S.   P A T E N T   T E X T   F I L E        *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
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=> s print###(5a)status

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                230034 PRINT###
            69925 STATUS
             1748 STATUSES
            70172 STATUS
                    (STATUS OR STATUSES)
L1          1539 PRINT###(5A)STATUS

=> s bidirection## or bi(2a)direction##
               23153 BIDIRECTION##
            50902 BI
           108936 BIS
           155383 BI
                    (BI OR BIS)
         1064334 DIRECTION##
            13493 BI(2A)DIRECTION##
L2         33912 BIDIRECTION## OR BI(2A)DIRECTION##

=> s l2(8a)print###
          230034 PRINT###
L3           661 L2(8A)PRINT###

=> s l1 and l3
L4           116 L1 AND L3

=> s scan### or read##
          120913 SCAN###
        472286 READ##
L5        530139 SCAN### OR READ##

=> s l4 and l5
L6           105 L4 AND L5

=> s computer or host
          191357 COMPUTER
            47597 COMPUTERS
           203407 COMPUTER
                    (COMPUTER OR COMPUTERS)
            55183 HOST
             7525 HOSTS
            56218 HOST
                    (HOST OR HOSTS)
L7        238202 COMPUTER OR HOST

=> s l6 and l7
L8            90 L6 AND L7

=> d 18 1-90
```

1. 5,710,908, Jan. 20, 1998, Adaptive network protocol independent interface; Chiu Ming Man, 395/500 [IMAGE AVAILABLE]

2. 5,706,411, Jan. 6, 1998, **Printer status** user interface and methods relating thereto; William B. McCormick, et al., 395/113, 114, 851 [IMAGE AVAILABLE]

3. 5,701,411, Dec. 23, 1997, Automatic detection of network hardware connection; Duc Tran, et al., 395/828 [IMAGE AVAILABLE]

4. 5,699,494, Dec. 16, 1997, Remote replication of printer operator panel; Carl Lee Colbert, et al., 395/114, 112, 113 [IMAGE AVAILABLE]

5. 5,699,493, Dec. 16, 1997, Method and apparatus for providing job accounting information to a **host** **computer** from a printer; Peter Stewart Davidson, Jr., et al., 395/114, 112 [IMAGE AVAILABLE]

6. 5,696,899, Dec. 9, 1997, Method and apparatus for adaptively determining the format of data packets carried on a local area network; George A. Kalwitz, 370/254, 465, 466, 467, 469, 908; 395/828, 835 [IMAGE AVAILABLE]

7. 5,694,618, Dec. 2, 1997, Apparatus which transmits a check signal to determine whether a **printer** is capable of **bidirectional** data transmission and remotely setting the **printer** operating environment accordingly; Masaaki Hibino, 395/866, 828, 834, 853, 882 [IMAGE AVAILABLE]

8. 5,682,547, Oct. 28, 1997, Status management and data transmission in a system comprising peripherals and a controller thereof; Makoto Sekiya, 395/821; 364/710.13, 717.5; 395/731, 882; 711/202 [IMAGE AVAILABLE]

9. 5,682,140, Oct. 28, 1997, Image forming device with end of life messaging for consumables; K. Trent Christensen, et al., 340/540, 635, 653, 691 [IMAGE AVAILABLE]

10. 5,680,645, Oct. 21, 1997, System for executing first and second independently executable programs until each program relinquishes control or encounters real time interrupts; William C. Russell, et al., 395/868, 676 [IMAGE AVAILABLE]

11. 5,666,558, Sep. 9, 1997, **Bidirectional** parallel protocol having **computer** indicates to the **printer** the acceptable data format for data transfer; Jeff D. Pipkins, 395/851; 364/235, 235.7, 260.1, 265.1, 930, 935.3, DIG.1, DIG.2 [IMAGE AVAILABLE]

12. 5,657,448, Aug. 12, 1997, System for an interactive network board remotely configurable by selecting from a plurality of functionality defining software, such as a printer server stored in prom; Robert D. Wadsworth, et al., 395/200.5; 364/238.3, 242.94, 927.97, 927.99, 949.4, 975.1, DIG.1, DIG.2; 395/652, 653 [IMAGE AVAILABLE]

13. 5,652,917, Jul. 29, 1997, System for transmitting and receiving combination of compressed digital information and embedded strobe bit between **computer** and external device through parallel printer port of **computer**; Patrick Maupin, et al., 395/888, 500 [IMAGE AVAILABLE]

14. 5,651,114, Jul. 22, 1997, External network adapter for handling normal and alternate channel data over a single **bi-directional** channel connected to a **printer**; Peter Stewart Davidson, Jr., 395/20
0.59; 364/235, 242.95,
930, 940.62, 975.1, DIG.1, DIG.2; 395/114, 200.79, 309 [IMAGE AVAILABLE]

15. 5,647,056, Jul. 8, 1997, Method and apparatus for managing access to a networked peripheral; Lorraine F. Barrett, et al., 395/200.5; 333/24R; 340/825.28; 379/412; 395/110, 113, 115, 116, 117, 200.59, 284, 830 [IMAGE AVAILABLE]

16. 5,645,359, Jul. 8, 1997, **Bidirectional** serial **printer**; Koji Goto, et al., 400/323; 347/16; 400/279, 568 [IMAGE AVAILABLE]

17. 5,636,332, Jun. 3, 1997, Device for controlling printer power down mode for display intensity; Masaaki Hibino, 395/112; 345/147; 364/707 [IMAGE AVAILABLE]

18. 5,633,992, May 27, 1997, Low-level direct connect for PCL printers; Joel H. Gyllenskog, 395/114, 112 [IMAGE AVAILABLE]

19. 5,625,401, Apr. 29, 1997, Thermal printhead with enhanced remote voltage sense capability; Christopher A. Wiklof, et al., 347/208 [IMAGE AVAILABLE]

20. 5,625,399, Apr. 29, 1997, Method and apparatus for controlling a thermal printhead; Christopher A. Wiklof, et al., 347/195, 211 [IMAGE AVAILABLE]

21. 5,623,675, Apr. 22, 1997, Printing system, and method of receiving and processing interrupt request in printer; Toshie Mizuki, 395/733, 101 [IMAGE AVAILABLE]

22. 5,623,604, Apr. 22, 1997, Method and apparatus for remotely altering programmable firmware stored in an interactive network board coupled to a network peripheral; William C. Russell, et al., 395/712; 364/276.3, 280.3, 281.9, 962.1, DIG.1, DIG.2; 395/183.14, 200.51, 653; 711/103 [IMAGE AVAILABLE]

23. 5,613,160, Mar. 18, 1997, In an interactive network board, method and apparatus for placing a network peripheral in a default configuration; Andrew J. Kraslavsky, et al., 395/836, 114, 117, 200.8, 828, 835, 839 [IMAGE AVAILABLE]

24. 5,613,096, Mar. 18, 1997, Network protocol sensor; Daniel A. Danknick, 395/500, 651, 831 [IMAGE AVAILABLE]

25. 5,611,046, Mar. 11, 1997, Method and apparatus for interfacing a peripheral to a local area network; William C. Russell, et al., 395/115; 364/DIG.1; 395/828, 835, 839 [IMAGE AVAILABLE]

26. 5,606,671, Feb. 25, 1997, Serial port using non-maskable interrupt terminal of a microprocessor; Robert D. Wadsworth, et al., 395/286, 735, 891 [IMAGE AVAILABLE]

27. 5,581,795, Dec. 3, 1996, System for transmitting and receiving digital information through parallel printer port of **computer** by using embedding strobe bit in eight bit data of printer port; Patrick Maupin, et al., 395/882; 364/251.3, 260.6, 260.81, 927.95, DIG.1, DIG.2; 395/500 [IMAGE AVAILABLE]

28. 5,581,669, Dec. 3, 1996, System and method for peripheral data transfer; David W. Voth, 395/113 [IMAGE AVAILABLE]

29. 5,568,612, Oct. 22, 1996, Method and apparatus for advertising services of two network servers from a single network node; Lorraine F. Barrett, et al., 395/200.33; 364/DIG.1, DIG.2; 395/200.49 [IMAGE AVAILABLE]

30. 5,557,783, Sep. 17, 1996, Arbitration device for arbitrating access requests from first and second processors having different first and second clocks; Osman O. Oktay, et al., 395/552; 364/228.1, 242.91, 270.4, 271.5, DIG.1; 711/150 [IMAGE AVAILABLE]

31. 5,555,440, Sep. 10, 1996, Parallel interface for connecting data processing devices to one another over bidirectional control lines; Jorg Oppat, 395/892; 364/240, 935.3, DIG.1, DIG.2; 395/306 [IMAGE AVAILABLE]

32. 5,550,997, Aug. 27, 1996, In an interactive network board, a method and apparatus for preventing inadvertent loading of a programmable **read** only

memory; Tony K. Ip, et al., 711/103; 364/965.76, DIG.2; 395/113, 200.52, 309
[IMAGE AVAILABLE]

33. 5,550,957, Aug. 27, 1996, Multiple virtual printer network interface;
Peter S. Davidson, Jr., et al., 395/114, 112 [IMAGE AVAILABLE]

34. 5,542,071, Jul. 30, 1996, System for determining communication speed of
parallel printer port of **computer** by using start timer and stop timer
commands within data combined with embedded strobe; Patrick Maupin, et al.,
395/500; 364/242.1, 251.4, 271.5, DIG.1; 395/557 [IMAGE AVAILABLE]

35. 5,537,626, Jul. 16, 1996, Apparatus for coupling printer with LAN to
control printer operation by transferring control parameters, **printer
status** data and **printer** configuration d
ata between printer and LAN;
Andrew J. Kraslavsky, et al., 395/828; 364/235, 284.4, 930, DIG.1, DIG.2;
395/200.58, 835, 839 [IMAGE AVAILABLE]

36. 5,537,550, Jul. 16, 1996, Interactive network board for logging
peripheral statistics with logging level commands; William C. Russell, et
al., 395/200.54; 364/264.4, 264.6, 944.9, DIG.1, DIG.2; 395/184.01, 200.8,
835 [IMAGE AVAILABLE]

37. 5,534,974, Jul. 9, 1996, **Printing** apparatus performing **bidirectional**
communication with a plurality of user terminals; Hironobu Hasegawa, 399/1,
81 [IMAGE AVAILABLE]

38. 5,530,862, Jun. 25, 1996, In an interactive network board, method and
apparatus for loading independently executable modules in prom; Robert D.
Wadsworth, et al., 395/651; 364/244.6, 280.2, 281.9, DIG.1 [IMAGE AVAILABLE]

39. 5,507,003, Apr. 9, 1996, Parallel interface protocol for **bidirectional**
communications between **computer** and **printer** using **status** lines for
transmitting data during a reverse channel operation; Jeff D. Pipkins,
395/851; 364/235, 235.7, 260.1, 265.1, 930, 935.3, DIG.1, DIG.2; 395/823
[IMAGE AVAILABLE]

40. 5,506,958, Apr. 9, 1996, Error detection for parallel data transfer
between a processor and a peripheral device by comparing regisgers storing a
sum of values in bytes of data transferred; Mark Myran, 395/182.16; 371/37.6,
37.7, 53; 395/185.05 [IMAGE AVAILABLE]

41. 5,477,476, Dec. 19, 1995, Power-conservation system for **computer**
peripherals; David J. Schanin, et al., 395/750.06; 364/273, 273.1, 273.2,
273.3, 273.5, 492, DIG.1 [IMAGE AVAILABLE]

42. 5,471,564, Nov. 28, 1995, System and method for dynamic printer timeout;
Stephen V. Dennis, et al., 395/114, 110, 672 [IMAGE AVAILABLE]

43. 5,471,563, Nov. 28, 1995, System and method for automatic resolution
reduction; Stephen V. Dennis, et al., 395/114; 345/428; 395/109, 110 [IMAGE
AVAILABLE]

44. 5,469,533, Nov. 21, 1995, Resource-oriented printer system and method of
operation; Stephen V. Dennis, 395/114, 110, 115 [IMAGE AVAILABLE]

45. 5,469,532, Nov. 21, 1995, System and method for font wrapping printer
data; Brett C. Gerlach, et al., 395/102, 112, 114, 116 [IMAGE AVAILABLE]

46. 5,467,435, Nov. 14, 1995, System and method for mode switching; George

H. Douglas, et al., 395/114, 112, 115, 116 [IMAGE AVAILABLE]

47. 5,461,701, Oct. 24, 1995, System and method for peripheral data transfer; David W. Voth, 395/101 [IMAGE AVAILABLE]

48. 5,453,982, Sep. 26, 1995, Packet control procedure between a **host** processor and a peripheral unit; Ricky J. Pennington, et al., 370/235, 389; 395/200.67, 830; 711/170 [IMAGE AVAILABLE]

49. 5,438,528, Aug. 1, 1995, Method and apparatus for testing an interactive network board in a local area network (LAN).; H. Brad Emerson, et al., 364/580, 481; 370/241, 245; 371/20.1; 395/185.09, 200.54 [IMAGE AVAILABLE]

50. 5,425,135, Jun. 13, 1995, Parallel interface for printer; Tetsuro Motoyama, et al., 395/114, 101 [IMAGE AVAILABLE]

51. 5,418,904, May 23, 1995, Image forming system; Kunio Tomiyasu, et al., 395/114; 345/433; 355/24, 46; 358/401 [IMAGE AVAILABLE]

52. 5,371,873, Dec. 6, 1994, Image data processing terminal equipment coupled to an external device allowing independent use of memory area by the external device; Yuichi Niwa, 395/840; 364/235, 246, 246.3, 256.4, DIG.1; 395/101, 842 [IMAGE AVAILABLE]

53. 5,337,258, Aug. 9, 1994, Cost metrics; Stephen V. Dennis, 364/551.01 [IMAGE AVAILABLE]

54. 5,323,393, Jun. 21, 1994, Method and apparatus for obtaining and for controlling the status of a networked peripheral; Lorraine F. Barrett, et al., 370/449; 340/825.22 [IMAGE AVAILABLE]

55. 5,239,627, Aug. 24, 1993, **Bi-directional** parallel **printer** interface; James L. Beck, et al., 395/892 [IMAGE AVAILABLE]

56. 5,220,659, Jun. 15, 1993, System for matching data recovery time between different devices by extending a cycle upon detecting end of cycle; Ronald J. Larson, et al., 395/500; 364/926.9, 926.91, 927.92, 927.93, 927.94, 927.95, 928, 940, 941, 942, 942.8, 949, 949.1, 950, 950.2, 950.4, 950.5, 952, 952.1, DIG.2; 395/287, 309, 557 [IMAGE AVAILABLE]

57. 5,195,176, Mar. 16, 1993, Method and apparatus to enhance laser printer speed and functionality; James C. Y. Lung, 385/115; 395/110 [IMAGE AVAILABLE]

58. 5,193,008, Mar. 9, 1993, Interleaving vertical pixels in raster-based laser printers; Allen L. Frazier, et al., 358/298; 347/254 [IMAGE AVAILABLE]

59. 5,134,495, Jul. 28, 1992, Resolution transforming raster-based imaging system; Allen L. Frazier, et al., 358/298; 347/254; 358/296, 456 [IMAGE AVAILABLE]

60. 5,124,809, Jun. 23, 1992, Image forming system; Akira Koishikawa, 358/400, 296, 406, 407, 442, 468 [IMAGE AVAILABLE]

61. 5,123,089, Jun. 16, 1992, Apparatus and protocol for local area network; Michael S. Beilinski, et al., 395/200.67; 364/234, 234.3, 235, 235.7, 236.2, 237.2, 237.4, 237.7, 238.5, 239, 239.7, 240, 240.1, 240.8, 240.9, 241, 241.7, 241.9, 242.6, 242.7, 242.94, 242.95, 259, 259.4, 264, 264.2, 265, 265.1, 266.3, 270, 270.1, 284, 284.1, 284.2, 284.3, 284.4, DIG.1 [IMAGE AVAILABLE]

62. 5,111,218, May 5, 1992, System for electronically controlling LED-array

image printer; Donald R. Lebeau, et al., 347/240; 358/296 [IMAGE AVAILABLE]

63. 5,075,875, Dec. 24, 1991, Printer control system; Richard I. Love, et al., 395/117; 400/76 [IMAGE AVAILABLE]

64. 4,999,654, Mar. 12, 1991, Image forming system; Fumitaka Maruo, et al., 347/225, 129, 900 [IMAGE AVAILABLE]

65. 4,963,894, Oct. 16, 1990, System for electronically controlling LED-array image printer; Donald R. Lebeau, et al., 347/237, 262; 358/296 [IMAGE AVAILABLE]

66. 4,875,174, Oct. 17, 1989, Instant label printer for **host** **computer**; Robert Olodort, et al., 707/507; 101/288; 347/107; 395/101; 400/63, 83 [IMAGE AVAILABLE]

67. 4,846,597, Jul. 11, 1989, Line printer panel and control system; David V. Bryant, et al., 400/472; 341/23, 35; 400/83 [IMAGE AVAILABLE]

68. 4,746,233, May 24, 1988, Automatic printing apparatus utilizing turnaround document; Ignacio B. Garcia de Osuna, et al., 400/73; 101/66, 287; 271/2; 400/105, 625; 414/791; D18/3 [IMAGE AVAILABLE]

69. 4,733,310, Mar. 22, 1988, Paper sheet and envelope feeder apparatus; Ludwig J. Kapp, et al., 358/300; 399/371 [IMAGE AVAILABLE]

70. 4,710,886, Dec. 1, 1987, Table driven print formatting; Allen W. Heath, 395/117; 364/943.43, 943.44, DIG.2; 400/3, 70, 279; 707/523 [IMAGE AVAILABLE]

71. 4,651,278, Mar. 17, 1987, Interface process for an all points addressable printer; Alexander Herzog, et al., 395/117; 364/926.9, 930, 930.4, 931, 931.4, 935, 935.2, 937, 939, 939.3, 940.8, 943, 943.1, 943.9, 944.7, 946.2, 948.1, 957, 957.1, 957.3, 961.2; 400/61, 76 [IMAGE AVAILABLE]

72. 4,603,385, Jul. 29, 1986, Integrated data processing/text processing system having a terminal with dual emulation and enhanced function capabilities; Mark W. Mueller, et al., 395/500; 364/221, 221.2, 222.2, 222.3, 225.6, 230.6, 231, 231.1, 232.8, 232.93, 234, 235, 237.2, 238, 238.2, 238.3, 238.5, 239, 239.3, 239.9, 240, 241.9, DIG.1 [IMAGE AVAILABLE]

73. 4,463,435, Jul. 31, 1984, Printer control system with controlled acceleration and deceleration; Barry R. Cavill, 395/113; 318/599, 603; 364/174, 183; 395/105; 400/322 [IMAGE AVAILABLE]

74. 4,452,136, Jun. 5, 1984, Printer subsystem with dual cooperating microprocessors; William W. Boynton, et al., 101/93.05; 364/926.9, 926.93, 927.2, 927.5, 927.8, 927.92, 927.98, 928, 930, 930.4, 931, 931.4, 931.41, 931.49, 937, 942.8, 943.9, 948.3, DIG.2; 395/112, 114; 400/70, 224, 225, 616.1, 656 [IMAGE AVAILABLE]

75. 4,434,419, Feb. 28, 1984, Cursor control circuit for plural displays for use in a word processing system; Robert A. Couper, et al., 345/2, 157; 400/83 [IMAGE AVAILABLE]

76. 4,423,975, Jan. 3, 1984, Form trimming apparatus and method for line printer; Horst M. Krenz, 400/616; 225/99; 400/621.1 [IMAGE AVAILABLE]

77. 4,419,736, Dec. 6, 1983, Teleprinter terminal; Gay A. Christensen, et al., 364/710.13, 919.5, 926.1, 926.2, 926.7, 926.9, 926.91, 927.8, 928, 928.1, 928.2, 928.4, 928.5, 928.6, 929, 930, 930.4, 930.7, 931.4, 931.47,

932.8, 933.9, 935, 935.2, 935.3, 935.4, 935.45, 935.46, 935.6, 939, 939.5, 940, 940.1, 940.5, 940.81, 941, 942, 942.3, 942.4, 942.5, 942.8, 943.9, 944.9, 945.6, 947, 947.5, 948.1, 949, 949.1, 950, 950.1, 950.4, 958, 958.3, 964, 964.1, DIG.2 [IMAGE AVAILABLE]

78. 4,353,653, Oct. 12, 1982, Font selection and compression for printer subsystem; Lee T. Zimmerman, 400/70; 364/919.5, 920, 926.7, 926.9, 927.83, 930, 930.4, 931, 931.5, 935, 935.2, 935.5, 937, 938, 938.4, 940, 940.1, 942.3, 942.5, 943, 943.1, 943.44, 943.5, 943.9, 944.9, 948.1, 948.2, 949, 949.3, 957, 957.1, 962, 962.4, 963, 963.3, 964, 964.1, DIG.2; 400/55, 109, 110, 171, 225, 248, 616.1 [IMAGE AVAILABLE]

79. 4,353,298, Oct. 12, 1982, Partial line turnaround for printers; Gregory N. Baker, et al., 101/93.05; 364/920, 926.1, 926.3, 926.9, 927.83, 930, 930.7, 937, 939, 939.2, 939.4, 940, 940.1, 942.3, 942.5, 943, 943.44, 943.5, 943.9, 944.9, 948.1, 948.2, 949, 957, 957.1, 957.8, 963, 963.3, DIG.2; 400/70, 225, 323, 616.1 [IMAGE AVAILABLE]

80. 4,325,440, Apr. 20, 1982, Method and system for computing special fees in a parcel postage metering system; Raymond R. Crowley, et al., 177/25.15, DIG.3 [IMAGE AVAILABLE]

81. 4,313,683, Feb. 2, 1982, Microcomputer control of ribbon drive for printers; Earl T. Brown, et al., 400/225, 219.1, 221, 234, 236.2, 248, 249, 616.2, 902 [IMAGE AVAILABLE]

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